from the trial were mapped to quality of life data from the literature to estimate the effectiveness of each vaccine. The time horizon was one year's influenza season for costs and a lifetime for quality-adjusted life years (QALYs). **RESULTS:** The average per-participant direct medical costs (including vaccine cost) and societal costs were $47 and $60 lower in the HD arm. Hospitalizations represented over 91% of the total cost and were less frequent in the HD arm (7.7% of HD participants reported ≥1 hospitalization versus 8.4% in SD arm) and average length of stay (LOS) across all participants was shorter in the HD arm (0.49 days vs 0.56 days). HD was associated with 0.0004 more QALYs per participant and, due to cost savings, dominated SD in the CUA. **CONCLUSIONS:** Despite the higher price of HD vs. SD, the total direct medical and societal costs were lower per HD vaccinee. This was driven by a reduction in the number of hospitalizations and in the LOS for those hospitalized. HD dominated SD in the CUA.

PIN70

HEALTH ECONOMIC EVALUATION OF DIFFERENT VACCINATION STRATEGIES AGAINST VARICELLA AND HERPES ZOSTER IN GERMANY

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OBJECTIVES: Infection with varicella-zoster virus (VZV) causes two distinct vaccine-preventable diseases: varicella and herpes zoster (HZ). Universal childhood varicella vaccination is recommended in Germany since 2004. However, country-wide vaccination against HZ has not been introduced yet. The objective of this study was to estimate the cost-effectiveness of different VZV vaccination strategies in Germany from a societal perspective: (i) additional introduction of routine HZ vaccination in the elderly, (ii) discontinuation of universal varicella vaccination, or (iii) a combination of both previously mentioned options. **METHODS:** The health economic analysis was based on an age-structured model of VZV transmission and vaccination in Germany. The time horizon of the dynamic model was 100 years. Treatment costs of varicella and HZ were estimated from health insurance claims data. A 3% discount rate was used for future costs and health effects. All vaccination strategies were evaluated assuming the existence or non-existence of exogenous boosting. When assuming exogenous boosting, universal childhood varicella vaccination might cause an increased HZ incidence in the elderly. **RESULTS:** Compared to current universal two-dose childhood varicella vaccination, the incremental cost-effectiveness ratio of additional HZ vaccination (base-case: vaccination at 60 years of age and waning of vaccine-induced immunity) was EUR 50,978 and EUR 47,720 per quality-adjusted life year (QALY) when assuming the existence and non-existence of exogenous boosting, respectively. Discontinuation of universal varicella vaccination led, irrespective of additional HZ vaccination, to both cost-savings and QALY gains when considering exogenous boosting. When exogenous boosting was discarded, cost-savings came along with QALY losses. **CONCLUSIONS:** The economic benefit of universal childhood varicella vaccination depends strongly on the existence of exogenous boosting. Further research is needed to measure the extent of exogenous boosting and its impact in health economic evaluations. Additional HZ vaccination can be considered as a marginally cost-effective intervention when considering a cost per QALY threshold of EUR 50,000.

PIN71

COST-EFFECTIVENESS OF OMBITASVIR/PARITAPREVIR/RITONAVIR AND DASABUVIR FOR PATIENTS WITH CHRONIC HCV IN THE NETHERLANDS

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OBJECTIVES: Chronic hepatitis C virus (HCV) is a considerable public health concern due to its significant impact on morbidity, mortality and healthcare costs in the Netherlands. Clinical studies of ombitasvir/paritaprevir/ritonavir and dasabuvir (OBV/PTV/r/DSV) with and without ribavirin have demonstrated high sustained viral response (SVR) rates for treatment of genotype 1 (GT1) and 4 (GT4) HCV patients. This study aims to evaluate the health economic value of OBV/PTV/r/DSV versus sofosbuvir in combination with pegylated interferon and ribavirin (SOF+PR) using a cost-utility analysis for HCV treatment-naïve patients with GT1 or GT4 in the Netherlands. **METHODS:** A Markov model with a lifetime horizon was developed based on previous published disease models and adapted to Dutch societal perspective. SVR rates, adverse events, regimen duration were gathered from published phase 3 trials. Transition probabilities, health state utilities resource use and costs were derived from literature, publically available sources and expert opinion. Baseline characteristics (e.g., age, fibrosis distribution) were based on the OBV/PTV/r/DSV trials. Total costs and QALYs were calculated per treatment option along with respective incremental cost-effectiveness ratios. **RESULTS:** In treatment-naïve GT1 patients with or without cirrhosis, OBV/PTV/r/DSV dominates SOF+PR at higher incremental QALYs (range: 0.09 to 0.51) and lower incremental costs (range: €-2,992 to €-13,077). For treatment-naïve GT4 patients, OBV/PTV/r/DSV dominates SOF+PR at higher incremental QALYs (0.04) and lower incremental costs (€-7,862). The results were robust to parameter uncertainty. Probabilistic sensitivity analysis shows OBV/PTV/r/DSV is cost-effective vs SOF+PR in 72% to 80% of simulations for GT1; 88% for GT4 patients respectively. **CONCLUSIONS:** At higher incremental health benefits and lower incremental costs, OBV/PTV/r/DSV dominates SOF+PR in treatment-naive GT1 and GT4 HCV patients. OBV/PTV/r/DSV improves the morbidity and economic impact of treating GT1 and GT4 HCV patients in the Netherlands.

PIN72

COST-EFFECTIVENESS ANALYSIS OF QUADRIVALENT INFLUENZA VACCINE IN SPAIN

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OBJECTIVES: Influenza, an acute viral infection causing annual epidemics, has a major impact on healthcare systems and society, but can be effectively prevented using vaccination. The World Health Organization currently recommends that influenza vaccines should include at least two virus A and one virus B lineages (trivalent vaccines; TIVs). A new quadrivalent vaccine, offering broader protection against influenza by including an additional virus B strain, received regulatory approval and is now recommended by several immunization committees (Advisory Committee on Immunization Practices (USA), Joint Committee on Vaccination and Immunisation (UK)). The present study was undertaken to estimate the cost-effectiveness of replacing TIVs with the quadrivalent influenza vaccine in Spain. **METHODS:** A static, lifetime, multi-cohort model with a one-year cycle time was developed to assess the costs and health outcomes associated with trivalent vs. quadrivalent vaccines. The model followed the lifetime of a cohort vaccinated each year according to local health authority recommendations. Information on circulating influenza virus strains, obtained from the National Epidemiology Centre, allowed the determination of whether the B strain included in TIVs matched the circulating one. The cost-effectiveness analysis was conducted from a societal perspective. The costs and outcomes were discounted at 3% and the robustness of the results was tested using one-way and probabilistic sensitivity analyses. **RESULTS:** Compared with TIVs, the quadrivalent influenza vaccine reduced the number of influenza cases, as well as influenza-related complications and deaths. The incremental cost-effectiveness ratio (ICER) was 8,748 €/QALY. One-way sensitivity analysis showed virus A circulation and mismatch with the B lineage included in TIVs as main drivers for ICER. Using probabilistic sensitivity analysis, ICER was below 30,000 €/QALY in 96% of the simulations. **CONCLUSIONS:** Replacing TIVs with quadrivalent influenza vaccine for national immunization programs in Spain could improve prevention by avoiding virus B mismatch and provide a cost-effective healthcare intervention.

PIN73

BROAD ACCESS TO TREATMENT IS COST-EFFECTIVE FOR PATIENTS WITH CHRONIC HEPATITIS C IN ENGLAND

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OBJECTIVES: Chronic Hepatitis C (CHC) is an infectious disease associated with significant morbidity and mortality. Early access to treatment may mitigate the rise in CHC-related morbidity and mortality and prevent onward transmission. We have examined the cost-effectiveness of providing broad access to treatment compared with limiting treatment to patients with advanced fibrosis. **METHODS:** A Markov model with a lifetime horizon was constructed to assess the relative costs and outcomes of treating a population of patients with CHC regardless of fibrosis stage compared with restricting treatment until patients developed F3 or F4 (METAVIR system) fibrosis. Cycle length was 6 months, and costs and benefits were discounted at an annual rate of 3.5%. Published literature provided cost, natural history, and utility data. Patients entered the model at fibrosis stages F0-F4 (F0=no fibrosis; F4=compensated cirrhosis) reflective of the current distribution of fibrosis scores in the UK. In each cycle, patients remained in their current health state, achieved a sustained virologic response (equivalent to a cure), experienced disease progression or died. Advanced liver disease states (decompensated cirrhosis, hepatocellular carcinoma, and transplantation) were associated with excess mortality. Cost-effectiveness was assessed using the incremental cost-effectiveness ratio (ICER), expressed as cost per quality-adjusted life year (QALY). **RESULTS:** Preliminary results indicate that treating all patients compared with the restricted treatment strategy is associated with incremental costs of £4,098 and incremental QALYs of 1.44 per patient, resulting in an ICER of approximately £2,855. **CONCLUSIONS:** Treating all patients is cost-effective compared with restricting treatment to patients with advanced fibrosis only. The latter strategy is unlikely to mitigate the future burden of HCV-related healthcare or significantly reduce onward transmission. Treating all patients aligns closely with the NHS Five Year Forward View strategy which strongly emphasises prevention and public health, and would facilitate strategies to raise awareness and treatment of HCV.

PIN74

COST-UTILITY ANALYSIS OF DOLUTEGRAVIR/ABACAVIR/LAMIVUDINE (DTG/ABC/3TC) AS A SINGLE TABLET TREATMENT OF NAÏVE HIV INFECTED PATIENTSS

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OBJECTIVES: One significant innovation of combination antiretroviral therapy (cART) has been the introduction of a once-daily fixed-dose combination to either maintain or increase treatment adherence. DTG/ABC/3TC is a highly efficacious and well-tolerated once-daily regimen for HIV-infected patients. The objective of the study was to assess the cost-utility (C/U) of treatment initiation with DTG/ABC/3TC single tablet regimen (STR) in ART-naïve HIV infected patients. **METHODS:** A microsimulation model was developed to compare, from the Spanish Health System perspective, the C/U of treatment inititation with DTG/ABC/3TC vs. the treatment initiation with any of the following regimens: Emtricitabine/Tenofovir/Efavirenz (FTC/TDF/EFV), and Darunavir/r (DRV/r) or Raltegravir (RAL) with Emtricitabine/Tenofovir (FTC/TDF) or Abacavir/Lamivudine (ABC/3TC) over a lifetime horizon. One million subjects were simulated using data